

## Sampling 2014—A manufacturer's perspective

Rolf Steinhaus, director, and Multotec colleagues

The biennial conference “Sampling 2014” was held on 29–30 July at the Pan Pacific Hotel, Perth, close to well established mining industry head offices and associated project companies in this city capital of Western Australia. This event was jointly organised by the Australasian Institute of Mining and Metallurgy (AusIMM) and CSIRO. Sampling 2014 follows on from the highly successful previous events (initiated in 2008, 2010 and 2012). Multotec, as an aligned manufacturer, see this as a must-be-there event. This conference is also conveniently held in alternate years with respect to the World Conference of Sampling and Blending (WCSB) conferences (initiated in 2003 in Denmark). Multotec has been asked to assess the value of this conference for an OEM manufacturer.

### Conference assessment

Sampling 2014 was a great opportunity of bringing together like minded people all having some stake in ensuring quality is achieved in all aspects of sampling, metallurgical accounting and QA/QC in the mining and minerals industry in particular and to a lesser degree, other industries. The event again brought together professionals from many varied disciplines including geologists, engineers, metallurgists, grade controllers, chemists, sampling consultants, specialists and managers involved in all aspects of sampling mineral streams and commodities from exploration, resource estimation and mine development through to process control, quality control and final mineral exports. The attendance figures (188 participants) tell a very clear message: there was a modest international contingent of 22, with the remainder of participants being from Australia. Foreign attendance was made up of six proudly South Africans (three of them presenting), i.e. Multotec (3), Wits University (1), University of Pretoria (1) and AMS (1). Other

international attendees were from USA (3), France (3), Canada (2), Finland (2), Kenya (1), Ghana (1), PNG (1), United Kingdom (1), Denmark (1) and Germany (1). The majority of the foreign contingent also regularly attends the international WCSB conferences, so there are many similarities in terms of the conference organisation and content. It was interesting to see that there were no visitors present from South America or Asia, possibly due to language barriers; their presence was clearly missed. There were some 22 exhibitors all told with booths related to sampling and preparation, on-line analysis, laboratory equipment and robotics, accreditation authorities as well as mining equipment and technology suppliers.

The sampling conference theme on this occasion was: “Sampling—Where it all begins” which highlights that despite advanced and leading edge technologies available in the minerals industry, correct extraction of samples for resource development, process control and plant optimisation is very often still neglected and misunderstood. This is a recurring and

necessary message from these forums—to ensure that sampling “correctness” is upheld. More attention, continuing education and spending needs to be allocated to proper sampling, sampling preparation and analysis on the geological and mineral process front to ensure that samples are representative—because sampling is, indeed: where it all begins!

Many key business decisions in industry are being based on poor sampling practices!

A conference of this calibre improves and enhances the level of understanding of the theory and practice of sampling (TOS) by key speakers, i.e. Francis Pitard, Dominique Francois-Bongarcon, Professor Kim Esbensen, Dr Geoff Lyman, Dr Ralph Holmes; all leading luminaries. This event has reinforced consistently, since 2003, the sampling theory of Pierre Gy (TOS) by reiterating its comprehensive and relevant approach.

Client presentations were of a very good standard, with themes covered: drill and blast hole sampling, sampling theory, plant automated sampling (with a comprehensive



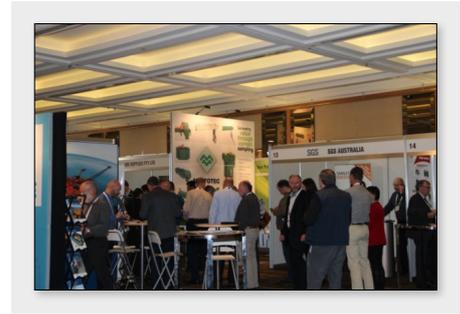
paper on the Cape Lambert Port B ship loading sampling and analysis facility). Papers on new developments in sampling equipment design, case studies and metallurgical accounting ensured the full range of sampling aspects were covered for the mining and minerals industry. There are many opportunities to branch out into other areas whether food, pharmaceuticals, agricultural, environmental etc. where identical sampling issues abound. The sharing of experience with visitors via presentations, or during the important breaks, helped further improve the understanding and hence accepted compliance to what is correct sampling practice. It was indeed good to see how we can learn from each other as we each focus on our areas of responsibility. The paper on mass-based versus time-based sampling scenarios in iron ore (an ongoing question for many) shed good light on the subject.

The lack of attendance by project houses was disappointing, however, and this was not a singular event, sadly. Project house process and mechanical engineers are key stakeholders in ensuring that final sampling solutions are effective and reliable, as they are often responsible for interfacing sampler equipment designs with new or existing plant—this goal is in reality not as often achieved, however. This is an unfortunate international trend as project houses pursue lowest cost procurement agendas. We need to find ways to bridge this gap between the sampling community conferences/exhibitions and project houses for the benefit of all involved parties.

### Multotec

Multotec participated at the AusIMM 2014 as a conference sponsor and with a standard booth—and, as always, was trying to provide a fresh look! The stand layout, with a shelf working surface, was in particular appreciated during the lunch breaks, and we found ourselves hosting very many visitors, which depleted our sweet bowl contents rapidly, but improved networking opportunities and communication reciprocally.

As an OEM manufacturer, like others, all trying to align themselves with TOS and the challenges that go with that, a conference presentation was also on the agenda, on a new pressurised pipe sampler for slurries intended to provide a better solution than what exists currently. We all need to combat current non-compliant devices to avoid misleading and biased results. We



are consistently aiming to achieve sampling correctness via designs and TOS-compliant protocols to clients. Equipment designs are never perfect, but we need strive to approximate to the desired standard as much as possible in practise. A sneak-preview of some of our initial developments was shown and we embraced subsequent constructive critique to improve our initial designs further.

### Company assessment

Some stand visitors, both existing and new clients or contacts, expressed significant interest in our products and offerings. Exhibitors, in general, are exposed to far more potential clients or partners in a short period of time at these events, and need to make time count. Apart from networking opportunities with visitors, we were also able to gather information on the status of international sampling activities and to discuss new advances and developments on equipment with the sampling fraternity—and even with some of our competitors. Sampling 2014 was indeed a successful conference in cementing our alliances internationally and hopefully becoming better known and more visible as a discerning mineral sampling equipment and solution provider. For some in our team, it was their first trip to Australia, a memorable experience of Perth's city centre, the Australian culture and people. The highlight is finally meeting clients in person, after the very many e-mails and telecoms over the years, and to be able to put a face to previous communication. As a final point, manufacturers really appreciate dealing with the academic delegates and with knowledgeable end users and customers. Clients can be very specific about what they want from their suppliers when sampling matters are discussed. The international WCSB conferences and the dedicated southern hemisphere conferences are a great success for all parties involved, commercial, academic, companies... See you at the next conference!

